

# TECH TALK: Tyres have feelings too



## New Tyres

Once again I heard well intentioned experienced riders only partially explain to some newbies that they needed to be careful after putting new tyres on their bikes. They were told that this was because the new tyres do not have as much traction on them until they are scuffed up a little.

It is not that I dispute that fact - new tyres do provide less traction until the new-tyre coating is worn off of them. But that is not the whole story and if no more is said about them an inexperienced rider could do something very foolish and dangerous if they rely simply on that information.

They could, for example, scuff the new tyres using an abrasive just after mounting them and then take off to tackle some twisties. Lower traction would not, then, be a significant problem. But that is a far cry from saying that the new tyres would be safely usable in stress situations as a result.

ALL new tyres grow during the first 100 kilometres or so of use. It is absolutely essential that you allow them to do so before putting them to a stress test such as attempting to aggressively navigate a set of twisties.

Why? Because it is the process of growing that results in a tight and secure bead to rim seating. If you put the tyres to undue stress before their beads have seated to the wheel rims there is a possibility that you will experience a catastrophic loss of air while heeled over in a turn.

Rather than using an abrasive to convert a new tyre into a used one, better by far to ride on them for a 100 kilometres or so. Besides, it's more fun doing it that way.

New or used, before you stress your tyres in the twisties you MUST allow them to get warm first. Traction available on a cold tyre is significantly less than for a warm one. Similarly, if you are doing a lot of twisties and your tyres get HOT, traction is diminished. Maximum traction exists only under normal operating temperatures.

## Tyre Pressure

For longest tyre life it is my recommendation that you strive to keep them at the higher limit of their recommended pressures (regardless of what your motorcycle owner's manual might say to the contrary.)

Further to this, pressure should be determined while the tyres are cold - meaning, have not been used for a couple of hours.

Outside temperatures affect your tyre pressure far more profoundly, however. As temperature goes, so does pressure.

There is nothing wrong with your tyre if it behaves like this, of course. What is being illustrated here is that you MUST check your tyre pressure on a regular basis (about once a week is reasonable) and to be particularly aware of it on cold days.

## Tyre Wear

Excessive tyre wear, and/or cupping, is a problem that most motorcyclists experience over time. Too often this is simply the result of failing to maintain proper tyre pressure. However, this is far from a complete answer.

Cupping is a phenomenon that is absolutely normal!

There are at least seven causes of cupping and/or uneven wear in the front tyre other than tyre air pressure:

- Most roads are banked away from the centre. Thus, if you ride vertical, the side of your tyre closest to the centre of the road wears more.
- Your tyres 'scuff' when you force a speed change with them. The rear tyre scuffs when you accelerate and when you brake (and every time you ride in a direction other than straight ahead.) Thus, it tends to have even 'cupping' as compared to the front tyre (which scuffs when you brake but not when you accelerate.)
- While alignment is not usually a problem with motorcycles - it can be.
- Carrying an unevenly divided load (all your tools, jumper cable, etc.) in one saddlebag or pannier can result in your riding the bike other than vertical most of the time.
- If one of your front shocks is defective you will experience uneven tyre wear.
- Excessive use of the front brake will result in excessive cupping.